## **CLAIMS**

## What is claimed is:

1	1.	A multiplexer comprising:
2		a first input;
3		a first channel coupled to the first input;
4		a second input;
5		a second channel coupled to the second input;
6		an output coupled to the first and second channels, wherein a coupling
1	capacitance of	f an inactive one of the first and second channels is not coupled directly to the
8	output.	
1	2.	The multiplexer of claim 1 wherein the first channel comprises:
2		a first input differential amplifier (DAF) coupled to the first input; and
3		a first plurality of transistors coupled between the first DAF and the output.
1	3.	The multiplexer of claim 2 wherein the second channel comprises:
2		a second input differential amplifier (DAF) coupled to the second input; and
3		a second plurality of transistors coupled between the second DAF and the
4	output.	
1	4.	The multiplexer of claim 1 which includes a non-inverted select input for
2	activating the	first channel and inactivating the second channel and an inverted input for

- inactivating the first channel and activating the second channel.
- 1 5. The multiplexer of claim 3 wherein the first plurality of transistors are turned off when the first channel is inactive.
- 1 6. The multiplexer of claim 5 wherein the second plurality of transistors are turned off when the second channel is inactive.

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